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Application Serial Number 10/659,008

ATTY DKT. NO.: C0012.10.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant, Pattee, or Identifier: **CARDOSO, Norman**

Application or Patent No. **10/659,008**

Filed or Issued: **September 10, 2003**

Group Art Unit: **3764**

Title: **NASAL CANNULA**

CERTIFICATE OF MAILING
37 CFR 1.8(A)

I hereby certify that this correspondence is being deposited with the U. S. Postal Service as First Class Mail in an envelope addressed to Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below.

December 18, 2003

Date

Signature

**PETITION TO MAKE SPECIAL BASED UPON APPLICANT'S AGE AND HEALTH
(37 C.F.R. § 1.102(c) AND MPEP § 708.02 IV)**

Applicant hereby petitions to make the above-identified application special based upon the Applicant being over the age of 65 and the Applicant's health.

The accompanying declaration by the Applicant sets forth evidence of the Applicant's age and current health condition.

The applicant believes that all claims presented in the application are direct to a single invention.

The Applicant retained the undersigned patent counsel to undertake a patentability search with respect to prior art related to the same general field of the present invention. Several references were uncovered during the pre-filing phase of United States utility patent application serial number 09/994,571, filed on November 27, 2001, and entitled, "NASAL OXYGEN CANNULA WITH SUPPLY TUBE MANAGEMENT." All references having a nasal cannula and support apparatus that are fastened or attached to the patient's forehead and/or nose were investigated. A third party search firm conducted the prior art search in

Class 128, subclasses 206.11, 206.14 and 207.18; Class 604, subclasses 94.01, 179 and 180 and Class 606, subclass 199 and on computer using the PTO WEST database. The references cited by the Examiner during the prosecution of related application serial number 09/994,571 were also considered.

A copy of the foregoing references were submitted on the Information Disclosure Statement filed contemporaneously with the application. Additional references were submitted on the Applicant's Supplement to Information Disclosure Statement Under 37 C.F.R 1.97, filed contemporaneously herewith.

Applicant believes that the following references are the most closely related to the subject matter encompassed by the claims:

<u>Inventor</u>	<u>Patent #</u>	<u>Reg. Date</u>
Timmons <i>et al.</i>	4,808,160	Feb. 28, 1989
Hawkins	2,259,817	Oct. 21, 1941
Francisco <i>et al.</i>	2,168,705	Aug. 8, 1939
Francisco <i>et al.</i>	2,245,969	June 7, 1941
Cardoso	6,093,169	Jul. 25, 2000

A detailed discussion of the patentability of the present invention over these references is attached hereto.

No fee is required with this petition, in accordance with 37 C.F.R. 1.102(c).

The undersigned is the attorney of record for the above-identified application.

Respectfully submitted,

Date: 12/18/03

By: 

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ATTORNEY FOR APPLICANT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant, Patentee, or Identifier: **CARDOSO, Norman**Application or Patent No. **10/659,008**Filed or Issued: **September 10, 2003**Group Art Unit: **3764**Title: **NASAL CANNULA**

Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**ATTACHMENT TO PETITION TO MAKE SPECIAL BASED UPON APPLICANT'S AGE AND
HEALTH (37 C.F.R. § 1.102(c) and MPEP § 708.02 IV)****DISCUSSION OF RELATED PRIOR ART****Proposed Invention As Currently Claimed:**

Applicant's proposed invention generally pertains to a nasal oxygen supply cannula and support apparatus. As set forth in independent claims 2 and 13, Applicant's invention is set forth in two general embodiments. Applicant filed contemporaneously with this Petition to Make Special a Preliminary Amendment Under 37 C.F.R. § 1.115 that cancelled originally filed claim 1 and added new claims 2 through 21. Applicant also filed contemporaneously herewith a Supplement to Information Disclosure Statement Under 37 C.F.R. 1.97. Applicant respectfully requests consideration of claims 2 through 21 set forth in the Preliminary Amendment, and this Discussion of Related Prior Art is directed only towards those claims.

Closely Related Prior Art References:

Among the references provided in the Information Disclosure Statement filed herewith under 37 C.F.R. § 1.97, U.S. Pat. No. 4,808,160 issued to Timmons *et al.* (hereinafter referred to as *Timmons*), U.S. Pat. No. 2,259,817 issued to Hawkins (hereinafter referred to as *Hawkins*), U.S. Pat. Nos. 2,168,705 and 2,245,969 issued to Francisco *et al.* (hereinafter collectively referred to as *Francisco*), and U.S. Pat. No. 6,093,169 issued to Cardoso (hereinafter referred to as *Cardoso*) are most closely related. *Timmons*, *Hawkins* and *Francisco* each disclose nasal cannulas/inhalers in which cannula supply tubes are fed centrally, between the wearer's eyes. **Figures 1-3** of *Timmons* depict a tubular headband 10 that retains a pair of cannula tubes 12 joined at a junction 16 within the headband. **Figure 1** of *Hawkins* illustrates an applicator tube 12 having nozzles insertable into a wearer's nostrils and retained on the wearer's head by use of a temple band 5. *Hawkins* is cumulative of *Timmons*. **Figures 1-3** of both *Francisco* references depict an inhaler apparatus having an eyeglass-type frame supporting an oxygen supply Y-fitting 12 secured proximally to the bridge of the wearer's nose and from which a pair of nasal tubes 15 extend downwardly and ultimately curve upward into the wearer's nostrils. **Figures 1-2** of *Cardoso* illustrate an L-shaped cannula support strut 2 having a long leg 4 and a short leg 6, wherein the strut is attached to the nose such that the long leg 4 extends in conformity with the ridge pole of the nose and the short leg 6 passes over the nose tip.

Distinctions Between Prior Art And Proposed Invention As Claimed:

The first claimset depends from claim 2, which recites “[a] nasal oxygen supply cannula and support apparatus...” including “a mono-lumen tube formed as a generally L-shaped strut for conforming to the contour of the nose of a wearer, said tubular L-shaped strut having a proximal end connected to an oxygen supply and a distal end connected to a nosepiece having a pair of intra-nasal oxygen delivery output ports”. *Timmons* and *Hawkins* disclose no such strut feature. Instead, **Figure 1** of *Timmons* discloses a pair of oxygen supply tubes extending across each side of the wearer's head and joined at a cannula junction with a forehead band from which each of the tubes extends on either side of the wearer's nose. Similarly, **Figure 1** of *Hawkins* discloses an apparently mono-lumen oxygen supply tube 12 that is braced by a crown band 7 against the wearer's forehead and runs down to a distal end having nozzles insertable into the wearer's nostrils. However, the mono-lumen supply tube 12 of *Hawkins* and the oxygen supply tubes of *Timmons* are not L-shaped as expressly required by the limitations of claim 2 and thus

cannot serve the dual role of oxygen supply source and nasal retraction device since they do not conform to the contour of the wearer's nose. Nor does either reference provide any structural support that serves the function of a strut as required by the limitations of claim 2. Both *Francisco* references disclose a nosebridge mounted cannula device as shown in **Figure 1** that includes a mono-lumen supply tube 14 that feeds a pair of branching nasal tubes. However, like *Timmons* and *Hawkins*, the embodiments depicted by both *Francisco* references fail to disclose an L-shaped tubular strut connected to a nosepiece having a pair of intra-nasal oxygen delivery ports.

The second general embodiment is set forth by Applicant's independent claim 13, which recites "[a] nasal cannula support apparatus" comprising, "a generally L-shaped longitudinal support brace having a long leg member for resting against the ridge pole of a wearer's nose and a short leg member flanging therefrom such that the longitudinal support brace substantially conforms to the wearer's nose" and "a tubing support cross brace transversely coupled to said longitudinal support brace, wherein said tubing support cross brace supports oxygen supply tubes on each side of a wearer's nose." The closest reference to Applicant's claim 13 is *Cardoso*, which, as illustrated in **Figure 1**, illustrates a generally L-shaped longitudinal support brace (strut 2) having a long leg 4 and a short leg 6 such that strut 2 substantially conforms to the wearer's nose. Applicant notes, however, that *Cardoso* is not designed to improve the support for the side-mounted oxygen supply tubes and does not disclose or suggest any type of tubing support cross brace transversely coupled to the strut 2.

For the foregoing reasons, Applicant believes the pending claims to be patentably new and non-obvious in view of *Timmons*, *Hawkins*, *Francisco*, *Cardoso* and any other references known to Applicant.

Respectfully submitted,

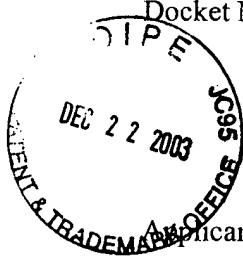
Date: 12/18/03

By:



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ATTORNEY FOR APPLICANT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant, Patentee, or Identifier: **CARDOSO, Norman**Application or Patent No. **10/659,008**Filed: **September 10, 2003**Title: **NASAL CANNULA**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
ATTENTION: Group Director, Art Unit 3764

DECLARATION OF NORMAN CARDOSO, M.D.

1. I am the inventor and applicant of the claimed subject matter of the above-identified United States patent application that was filed contemporaneously herewith. I have personal knowledge of each of the facts set forth herein.

2. I am sixty-nine (69) years old and was born on October 15, 1933.

3. Since 1984 I have been diagnosed as having central sleep apnea. The hypo-oxygenation of the cardiac musculature on the basis of this sleep apnea has caused a cardiomyopathy which has now resulted in cardiac failure due to the residual damage to the cardiac musculature.

4. I am concerned that I may not be able to provide meaningful assistance to my patent attorneys prosecuting this application if my conditions continue to run their normal course. My attorneys have advised me that the prosecution of a patent application may take more than two years. My attorneys also advised me that I might not receive an office action on this application for twelve months if a Petition to Make Special is not granted. I may be over seventy three years old by the time my application is finally granted or refused. In view of my health, I may be undergoing significant treatment or surgery within the next month if initial treatments are unsuccessful. These treatments may limit my availability to assist my attorneys. Additionally, I am uncertain whether these treatments may affect my memory and ability to concentrate. I am also concerned that my condition may become terminal.

5. As further evidence of my health condition, attached to this Declaration as Composite Exhibit "A" are copies of pages 4 and 5 of my echocardiogram performed on 08/07/03. As noted at the bottom of the aforementioned page 4, the left ventricular function is now severely depressed indicating deterioration of left ventricular output since the previous study.

I hereby declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that

SEP. 24. 2003 11:27AM

ROGERS TOWERS

NO. 5043 P. 3

Docket No.: C0012.10.I

PATENT APPLICATION

these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of the Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: Sept. 24, 2003

Norman Cardoso, M.D.
Norman Cardoso, M.D.

DEC 22 2003

GENEALOGICAL
SOCIETY OF AMERICA

Commonwealth of Massachusetts
UNITED STATES OF AMERICA

AMENDED

CERTIFICATE OF BIRTH

FROM THE RECORDS OF BIRTHS IN THE TOWN OF HUDSON
MASSACHUSETTS, U. S. A.

1. Date of Birth	October 15, 1933
2. Full Name of Child	Norman Cardoso
3. Sex, Color and if Twin	Male White
4. Place of Birth	Hudson, Massachusetts
5. Residence of Parents	Hudson, Massachusetts
6. Name of Father	Manuel Martins Cardoso
7. Occupation of Father	Electrician
8. Birthplace of Father	Mourilbe, Portugal
9. Maiden Name of Mother	Josephine Augusta
10. Birthplace of Mother	Ameira, Portugal
11. Date of Record	October 30, 1933, Vol. 3, Page 29, Line 91

I, Ralph W. Warner depose and say that I hold the office of Town Clerk of the Town of Hudson, County of Middlesex and Commonwealth of Massachusetts; that the records of Births, Marriages and Deaths required by law to be kept in said Town are in my custody, and that the above is a true extract from the records of Births in said Town, as certified by me.

WITNESS my hand and the seal of said Town, on the 21st.
day of January 1963.


 Ralph W. Warner
 Town Clerk

Shands HealthCare***Confidential*****Not an Original**CARDOSO MD, NORMAN
DOB: 10/15/1933 M

PID# MRN: 00642693

SHANDS.DIF

Aortic Valve:

The aortic valve is tricuspid.

Tricuspid Valve: Minimal insufficiency. The tricuspid regurgitation Doppler signal was not adequate for accurate estimation of RV systolic pressures.

Pulmonic Valve:

Minimal insufficiency.

Additional Comments:

Subcostal images are not interpretable. Compared to the previous study of 08/19/97 : LV systolic function is now severely depressed.

Conclusions:

Suboptimal technical quality.

Moderate left ventricular dilation. Severe left ventricular systolic dysfunction.

Normal right ventricular systolic function.

Moderate left atrial enlargement.

Shands HealthCare

CARDOZO, MD ,NORMAN

DOB: 10/15/1933 M

Confidential

Not an Original

PRDX MRN: 00642693

SHANDS.HC

Karen K. Hamilton, M.D.

Verified on 06/13/03 04:26:28 PM

Requested by CARLCM on 08/22/03 at 14:14 from F049 Page 5

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